

# KENTUCKY ECONOMIC INDICATORS

July 2008 as of September 23, 2008

## **KY Composite Index of Leading Indicators increased by 0.9 percent in July.**

- The Leading Index has increased for the fourth time in 2008.
- The month-over-same-month-last-year growth rate declined for the eighth consecutive month with -1.4 percent.
- The component indicators leaned negative, 2:3.
  - + KY Labor Intensity Index increased 5.7 percent.
  - KY Index of Initial UI Claims decreased by 1.7 percent.
  - US Retail Sales decreased by 5.7 percent.
  - + US Manufacturer's New Orders Index increased by 6.0 percent.
  - The Louisville Help Wanted Index decreased by two points to 13.

*Component weights for July are 68.2, 13.3, 12.2, 5.0 and 1.2 respectively.*

## **KY Composite Index of Coincident Indicators increased by 2.0 percent in July.**

- The Coincident Index growth is positive for the first time in six months.
- The month-over-same-month-last-year growth rate is positive for the fifty-ninth consecutive month at 0.03 percent.
- Component indicators leaned negative, 1:2.
  - + KY Non-farm Employment increased 5.8 percent.
  - + US Industrial Production Index increased 0.7 percent.
  - US Personal Income Less Transfers decreased 2.1 percent.

*Component weights for July are 37.9, 31.2 and 18.3 respectively. Component weights do not sum to one because the two US components were discounted to give the Kentucky component more weight.*

The Kentucky Leading Index increased slightly for July 2008. This is the twelfth consecutive month that the growth rate for the Leading Index has changed signs. The negatives still heavily outweigh the positives and therefore the leading indicators still signal a softening state economy. The last trio of signs indicating a turning point in the reference series occurred in June through August of 2007. The inference is that the Kentucky economy will have entered a contraction period six to nine months from that time.

The current level of the Kentucky Leading Index, coupled with the negative monthly growth of the Coincident Index, corroborates the August 2007 signal for a downturn. Three of the five leading index components experienced negative growth for July. Most of the explanation behind the Leading Index value for July lies with the Kentucky Labor Intensity Index component and its now-chronic seasonalizing issues.

The Kentucky Labor Intensity Index is derived from the product of seasonalized employment data and average weekly hours data for five Kentucky Manufacturing industries. Before these data are useful for analysis as economic indicators, seasonal factors must be applied to strip the elements solely attributable to predictable seasonal patterns. Over time, however, some major employers have changed their pattern of summer shut-downs and forced vacation periods. When employers change their annual seasonal practices, incorrect weights are applied to the nominal employment data. The result is an illusory turbulence in the monthly growth rates.

Kentucky Manufacturing Employment in July increased by 4,400 jobs (23.5 percent). Transportation Equipment Employment, which is one of the five manufacturing industries in the Labor Intensity Index, increased by 6,100 jobs (12.3 percent) in July. This is the fifth consecutive year that the timing of seasonal layoffs during the summer period have conflicted with the survey date for a given month. Manufacturing employment for the last four Julys has been depressed, while the August manufacturing employment has risen sharply. This year, however, the June manufacturing employment has sharply declined while the July manufacturing employment has sharply increased.

Kentucky Manufacturing Employment increased a net 500 jobs (0.2 percent) from May to July of 2008. This is significantly less than the implied 23.5 percent that gets captured by the Kentucky Leading Index in the month of July in isolation. The Kentucky Leading Index for July, therefore, arguably contains an overstatement for the Kentucky Labor Intensity Index. Since this shift primarily affects the manufacturing sector in the summer months, we expect a more reliable depiction of labor intensity once we get past the summer shut-down period. We will continue to monitor the effects of changing firm behavior on the historical seasonal patterns to ensure that each variable in the indicators process yields a true cyclical signal, relating to real economic changes.

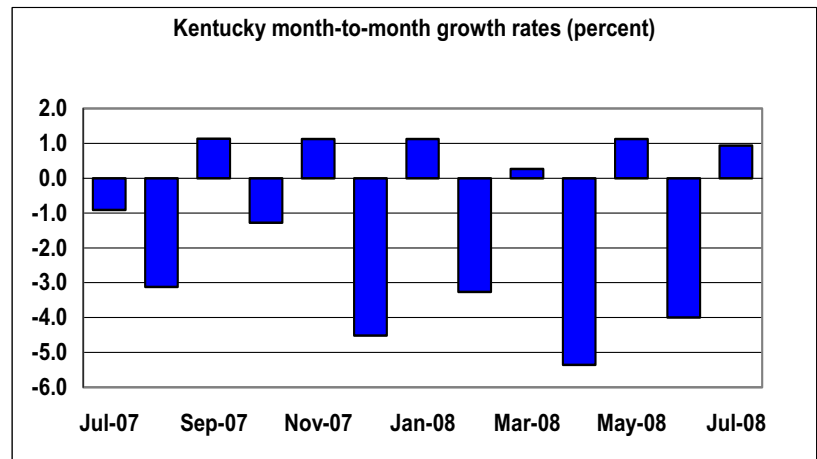
US Manufacturing Employment has suffered even more than the Kentucky counterpart. Month-to-month growth has been negative since July 2006. US Manufacturing Employment declined by 3.3 percent over June 2008, while it has declined a net 2.8 percent since July 2007. Over 770,000 seasonally adjusted jobs (-5.4 percent) have been lost in this supersector since June 2006.

The July 2008 Petroleum, Coal, Plastics and Rubber Products Employment increased by a net 300 jobs (1.8 percent) over June. The other three manufacturing industries in the Labor Intensity Index changed by an insignificant amount (less than 0.3 percent in absolute value each). Likewise, the Average Weekly Hours variable for all five manufacturing industries changed by an insignificant amount (less than 0.4 in absolute value each). It is clear that the main source of change for July is in the Transportation Equipment employment variable. It is not clear whether August will generate a rebound or further decline for Transportation Equipment Employment, Kentucky Manufacturing Employment, Kentucky Labor Intensity Index and the Kentucky Leading Index.

The second largest mover in July is the Louisville Help Wanted Index. The index has lost another two points falling to a new all-time low. The Louisville Help Wanted Index has historically been the most volatile component of the Leading Indicator series and therefore it has the lowest weight in the system.

The US Manufacturer's New Orders Index was positive for the second straight month. These modest gains are still insufficient to bring it above where it was last year in July or even up to January 2008. The series is down 8.4 percent over last July.

Private services employment and manufacturing employment gains both bolstered the Kentucky Non-farm employment total, which rose 5.8 percent for July. This is up 0.8 percent over July 2007.



US Personal Income Less Transfer Payments fell for the eighth time in nine months. This series has fallen by just over \$1.2 billion since October 2007. That is a net decrease of 1.4 percent in nine months. The series is still up compared to last July with 0.9 percent growth since that date.

Our indices are compiled and published on a monthly basis, roughly two weeks following the Conference Board release of the U.S. Leading Index. A complete description of the Index of Leading Indicators and methodology was published in the University of Kentucky Center for Business and Economic Research *Kentucky Annual Economic Report, 2000*.

### Kentucky Reference Series

Inflation-adjusted personal income less transfer payments and policy-adjusted general fund tax receipts are combined to form the GOEA composite reference series.

### About the Indicators

#### Kentucky Leading Indicators

- **KY Labor Intensity Index:** Composed of seasonally adjusted weekly hours multiplied by employment for the following manufacturing industries: Lumber products; chemical and allied products; petroleum, coal, rubber and plastic products; fabricated metals and transportation equipment.
- **KY Initial Unemployment Insurance (UI) Claims Index:** This index has two components: Kentucky claims in their first month of payment and total U.S. initial claims. Additional claims for UI are the subset of initial claims filed by workers who have previously filed UI claims but are currently filing new claims with intermittent workforce attachment since their original claim. The claims in their first month of payment without intermittent qualified experience performed better in the testing process and were chosen accordingly. This is an inverted index. That is, when either component goes down, ceteris paribus, then the index value goes up. Likewise if either component goes up, then the index value goes down.
- **U.S. Retail Sales:** During turning points in the Kentucky economy, U.S. Retail Sales was not strictly concave or convex to the origin. For this reason inflexion points were used to test turning points in the U.S. Retail Sales series. U.S. Manufacturing and Trade Sales performed better than U.S. Retail Sales in testing, but because U.S. Manufacturing and Trade Sales was not published in a timely manner it had to be removed from the Kentucky Leading Index.
- **U.S. Manufacturer's New Orders Index:** This index has two components: US Manufacturer's New Orders for Nondefense Capital Goods and US Manufacturer's New Orders for Consumer Goods and Materials. Separately these two series slightly missed one or two turning points in the official reference series. But together they preceded each turning point.
- **Louisville Help-Wanted Index:** The Conference Board computes an index of help-wanted advertisements for major regions across the United States; Louisville is the only city in Kentucky covered by the Conference Board.

#### Table Notes:

- 1) Growth rates are computed with precise numbers. Due to rounding, two observations may have the same reported value but still exhibit growth at a more precise level.
- 2) More information is available on our website, [www.osbd.ky.gov](http://www.osbd.ky.gov)

**Office of State Budget Director  
Room 284, Capitol Annex  
Frankfort, Kentucky 40601-3453**

**Thomas Jones  
Phone: 502-564-7300  
taj@ky.gov**

**SELECTED KENTUCKY ECONOMIC INDICATORS**  
**SEASONALLY ADJUSTED**

	2007						2008						
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL
KY Leading Index (1992=100)	112.9	112.6	112.7	112.6	112.7	112.3	112.4	112.1	112.1	111.6	111.7	111.3	111.4
% Chg Previous Month SAAR	-0.9	-3.1	1.1	-1.3	1.1	-4.5	1.1	-3.3	0.3	-5.4	1.1	-4.0	0.9
% Chg Same Month Last Year	0.1	0.0	-0.1	0.0	0.1	-0.9	-0.4	-0.6	-1.1	-1.2	-1.4	-1.5	-1.4
KY Leading Index Diffusion Index	63.3	60.0	60.0	60.0	56.7	56.7	60.0	56.7	56.7	56.7	56.7	56.7	50.0
KY Coincident Index (1992=100)	136.2	136.2	136.5	136.4	136.7	136.7	136.8	136.6	136.6	136.2	136.1	136.0	136.2
% Chg Previous Month SAAR	2.5	0.5	1.9	-0.5	2.2	0.7	0.2	-1.3	-0.5	-2.9	-0.7	-1.1	2.0
% Chg Same Month Last Year	1.8	1.7	1.8	1.6	1.7	1.3	1.4	1.0	0.9	0.5	0.3	0.1	0.0
KY Non-farm Employment (000s)	1,869.3	1,868.4	1,870.8	1,874.5	1,877.9	1,880.0	1,881.5	1,880.5	1,881.6	1,878.5	1,879.1	1,875.8	1,884.6
% Chg Previous Month SAAR	-1.1	-0.6	1.6	2.4	2.2	1.4	1.0	-0.6	0.7	-2.0	0.4	-2.1	5.8
% Chg Same Month Last Year	1.5	1.1	1.2	1.5	1.5	1.0	1.2	1.2	1.0	0.8	0.5	0.3	0.8
KY Private Services Employment (000s)	1,181.6	1,182.6	1,180.7	1,185.8	1,187.0	1,188.4	1,194.7	1,193.9	1,191.2	1,189.7	1,185.6	1,183.9	1,188.6
% Chg Previous Month SAAR	-1.8	1.0	-1.8	5.3	1.2	1.5	6.5	-0.8	-2.7	-1.4	-4.1	-1.7	4.9
% Chg Same Month Last Year	1.9	1.9	1.6	1.7	1.5	1.2	1.6	1.7	1.1	1.1	0.3	0.0	0.6
KY Mfg Employment (000s)	256.3	252.8	254.8	253.9	253.1	250.7	250.6	250.4	253.3	250.7	251.8	247.9	252.3
% Chg Previous Month SAAR	-8.9	-15.2	9.9	-4.2	-3.7	-10.8	-0.5	-1.0	14.8	-11.6	5.4	-17.1	23.5
% Chg Same Month Last Year	-1.3	-3.4	-2.3	-0.9	-0.9	-3.3	-3.2	-3.3	-0.8	-2.8	-2.3	-4.0	-1.6
KY Unemployment Rate (%)	5.5	5.5	5.4	5.4	5.1	5.3	5.2	5.3	5.7	5.6	6.2	6.3	6.7
KY Index of Initial UI Claims (1992=100)	103.9	103.5	103.8	101.4	102.9	101.4	102.9	102.2	101.0	100.9	101.3	100.2	100.1
% Chg Previous Month SAAR	1.9	-5.4	4.7	-24.9	19.3	-16.4	19.9	-7.9	-13.0	-2.1	5.9	-12.6	-1.7
% Chg Same Month Last Year	0.6	1.0	1.1	-1.7	0.2	-2.1	-0.7	-0.5	-2.7	-2.2	-2.4	-3.4	-3.7
KY Labor Intensity Index (1992=100)	104.7	104.6	104.6	104.9	104.9	104.6	104.6	104.5	104.6	104.5	104.5	104.1	104.6
% Chg Previous Month SAAR	-0.9	-0.7	-0.5	3.5	0.1	-3.6	0.7	-0.7	0.1	-1.1	0.0	-4.3	5.7
% Chg Same Month Last Year	-0.1	-0.2	-0.2	0.4	0.4	-0.1	0.0	-0.1	0.1	-0.2	-0.3	-0.6	-0.1
Louisville HWI (1992=100)	23.0	22.0	23.0	23.0	19.0	20.0	19.0	18.0	20.0	15.0	15.0	15.0	13.0
% Chg Previous Month SAAR	-90.6	-41.3	70.5	0.0	-89.9	85.1	-46.0	-47.7	254.1	-96.8	0.0	0.0	-82.0
% Chg Same Month Last Year	-32.4	-31.3	-34.3	-36.1	-50.0	-52.4	-45.7	-41.9	-53.5	-48.3	-50.0	-46.4	-43.5
GF Total Tax Receipts (\$ mill)	608.6	566.5	822.3	639.4	624.7	822.3	724.3	564.7	610.5	922.7	610.3	813.5	619.9
% Chg Same Month Last Year	5.2	2.4	-1.5	1.5	-1.0	-6.7	6.1	3.8	-6.5	37.3	-22.2	3.2	1.9
GF Sales & Use Receipts (\$ mill)	251.0	241.8	235.5	246.7	236.1	235.2	296.7	205.5	209.6	232.4	238.4	249.0	266.1
% Chg Same Month Last Year	0.7	4.9	5.1	1.7	5.5	-1.5	3.7	6.2	-1.4	14.8	-12.0	2.5	6.0
GF Income Tax Receipts (\$ mill)	249.2	240.6	332.9	265.6	236.9	295.4	272.7	235.0	193.6	544.3	261.6	355.3	262.2
% Chg Same Month Last Year	9.0	5.8	18.1	6.9	-2.3	9.7	34.9	3.5	-5.1	92.1	-22.6	22.9	5.2

**SELECTED U.S. ECONOMIC INDICATORS  
SEASONALLY ADJUSTED**

	2007						2008						
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL
US Leading Index (2004=100)	104.6	103.6	103.7	103.2	102.8	102.6	102.1	101.9	101.9	102.0	101.9	102.0	101.3
% Chg Previous Month SAAR	8.4	-10.9	1.2	-5.6	-4.6	-2.3	-5.7	-2.3	0.0	1.2	-1.2	1.2	-7.9
% Chg Same Month Last Year	0.9	0.3	0.0	-0.7	-1.0	-1.7	-1.8	-1.7	-2.1	-1.8	-2.0	-1.8	-3.2
US Coincident Index (1996=100)	106.9	107.1	107.2	107.3	107.2	107.2	107.2	106.9	106.9	106.9	106.8	106.6	106.6
% Chg Previous Month SAAR	3.4	2.3	1.1	1.1	-1.1	0.0	0.0	-3.3	0.0	0.0	-1.1	-2.2	0.0
% Chg Same Month Last Year	1.9	1.9	1.9	1.6	1.5	1.1	1.2	0.8	0.6	0.5	0.3	0.0	-0.3
US Non-farm Employment (Mil.)	137.7	137.8	137.8	138.0	138.0	138.1	138.0	137.9	137.8	137.8	137.7	137.6	137.6
% Chg Previous Month SAAR	0.5	0.6	0.7	1.2	0.5	0.4	-0.7	-0.7	-0.8	-0.6	-0.4	-0.9	-0.5
% Chg Same Month Last Year	1.1	1.0	1.0	1.0	0.9	0.8	0.7	0.6	0.4	0.3	0.1	0.0	-0.1
US Service-Providing Employment (Mil.)	115.4	115.6	115.7	115.9	116.0	116.1	116.1	116.1	116.1	116.1	116.1	116.1	116.1
% Chg Previous Month SAAR	0.9	1.5	1.2	1.9	1.2	1.2	-0.1	0.1	-0.1	0.4	0.0	-0.1	-0.1
% Chg Same Month Last Year	1.6	1.6	1.5	1.6	1.4	1.4	1.3	1.1	1.0	0.9	0.8	0.7	0.6
US Manufacturing Employment (000s)	13,884.0	13,844.0	13,822.0	13,797.0	13,794.0	13,772.0	13,737.0	13,690.0	13,644.0	13,592.0	13,571.0	13,527.0	13,489.0
% Chg Previous Month SAAR	-0.5	-3.4	-1.9	-2.1	-0.3	-1.9	-3.0	-4.0	-4.0	-4.5	-1.8	-3.8	-3.3
% Chg Same Month Last Year	-2.1	-2.2	-2.2	-2.1	-1.9	-1.9	-2.0	-2.1	-2.2	-2.4	-2.4	-2.6	-2.8
US Unemployment Rate (%)	4.7	4.7	4.7	4.8	4.7	5.0	4.9	4.8	5.1	5.0	5.5	5.5	5.7
US Manufacturer's New Orders Index (1996=100)	134.5	130.2	129.5	129.7	129.4	130.4	126.8	125.9	125.4	123.5	122.0	122.6	123.2
% Chg Previous Month SAAR	38.0	-32.1	-6.4	2.2	-2.6	9.7	-28.9	-8.4	-4.5	-16.6	-13.5	5.7	6.0
% Chg Same Month Last Year	2.0	-0.2	-3.8	-0.8	-1.5	-2.5	-1.1	-2.9	-4.9	-7.0	-6.7	-6.4	-8.4
US Initial Claims for UI (000s)	308.6	325.3	318.4	330.0	340.1	344.6	339.2	346.0	374.8	367.3	369.0	390.5	420.1
% Chg Previous Month SAAR	-31.5	88.2	-22.7	53.6	43.6	17.1	-17.3	26.9	161.0	-21.5	5.7	97.3	140.3
% Chg Same Month Last Year	-2.4	2.7	-0.3	4.4	3.7	7.5	7.7	6.5	20.4	14.3	19.6	22.6	36.1
US Industrial Production Index (1992=100)	112.0	112.0	112.3	111.8	112.3	112.4	112.6	112.3	112.0	111.4	111.3	111.5	111.6
% Chg Previous Month SAAR	7.2	-0.3	3.1	-4.5	5.2	1.0	2.0	-3.3	-2.5	-6.0	-1.7	2.5	0.7
% Chg Same Month Last Year	1.7	1.6	2.2	1.9	2.5	2.0	2.5	1.6	1.5	0.4	0.3	0.1	-0.4
US Personal Income Less Trans. (Bil. 2000 chnd)	8,460.2	8,490.4	8,504.5	8,507.5	8,498.9	8,495.0	8,466.1	8,464.9	8,465.1	8,454.2	8,441.9	8,401.5	8,386.6
% Chg Previous Month SAAR	4.2	4.4	2.0	0.4	-1.2	-0.5	-4.0	-0.2	0.0	-1.5	-1.7	-5.6	-2.1
% Chg Same Month Last Year	3.8	4.1	3.4	2.3	1.8	1.4	1.0	0.5	0.3	0.3	0.3	-0.4	-0.9
CPI, All Urban (1982-84=100)	207.7	207.7	208.5	209.1	210.9	211.7	212.5	212.6	213.3	213.7	215.1	217.4	219.2
% Chg Previous Month SAAR	2.7	0.2	4.5	3.2	11.3	4.4	4.8	0.3	4.2	2.5	8.1	13.4	10.3
% Chg Same Month Last Year	2.4	1.9	2.8	3.5	4.4	4.1	4.4	4.1	4.0	3.9	4.1	4.9	5.5
US Retail Sales (\$Billions)	374.3	375.3	376.8	376.8	381.3	377.9	380.0	378.1	380.0	380.8	383.8	384.1	382.2
% Chg Previous Month SAAR	5.5	3.4	5.0	-0.1	15.2	-10.1	6.9	-5.9	6.2	2.5	9.8	0.9	-5.7
% Chg Same Month Last Year	3.7	3.7	4.9	4.8	5.8	3.4	3.9	2.7	2.3	2.8	2.0	3.1	2.1
US Consumer Expectations (1966=100)	81.5	73.7	74.1	70.1	66.2	65.6	68.1	62.4	60.1	53.3	51.1	49.2	53.5
% Chg Previous Month AR	184.5	-70.1	6.7	-48.6	-49.7	-10.4	56.6	-65.0	-36.3	-76.3	-39.7	-36.5	173.3
% Chg Same Month Last Year	12.4	8.4	-5.2	-17.3	-20.4	-19.2	-22.3	-23.4	-23.6	-29.8	-34.1	-34.1	-34.4
Ave. Prime Interest Rate (% NSA)	8.25	8.25	8.03	7.74	7.50	7.33	6.98	6.00	5.66	5.24	5.00	5.00	5.00